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#4

SEQUENCE LISTING

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HYDROLASE AND USES THEREFOR

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Asn Pro Glu Val Trp Met Asn Thr Ser Glu Ile Ile Ile Tyr Asn Gly
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tac ccc agt gaa gag tat gaa gtc acc act gaa gat ggg tat ata ctc 195
Tyr Pro Ser Glu Glu Tyr Glu Val Thr Thr Glu Asp Gly Tyr Ile Leu
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ctt gtc aac aga att cct tat ggg cga aca cat gct agg agc aca ggt 243
Leu Val Asn Arg Ile Pro Tyr Gly Arg Thr His Ala Arg Ser Thr Gly
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Pro Arg Pro Val Val Tyr Met Gln His Ala Leu Phe Ala Asp Asn Ala
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Ile Pro Tyr Gly Arg Thr His Ala Arg Ser Thr Gly Pro Arg Pro Val
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145 150 155 160
Lys Thr Gly Gln Glu Lys Leu Tyr Phe Ile Gly His Ser Leu Gly Thr
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Thr Ile Gly Phe Val Ala Phe Ser Thr Met Pro Glu Leu Ala Gln Arg
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Thr Gly Ile Phe Thr Arg Phe Phe Leu Leu Pro Asn Ser Ile Ile Lys
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gtg tat atg cag cat gcc ctg ttt gca gac aat gcc tac tgg ctt gag	288
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Thr Ile Gly Phe Val Ala Phe Ser Thr Met Pro Glu Leu Ala Gln Arg	
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Ser Glu Phe Met Ser Leu Trp Ala Gly Ser Asn Lys Lys Asn Met Asn	
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Gln Ser Arg Met Asp Val Tyr Met Ser His Ala Pro Thr Gly Ser Ser	
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Val His Asn Ile Leu His Ile Lys Gln Leu Tyr His Ser Asp Glu Phe	
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Gln Ser His Pro Pro Ile Tyr Asp Leu Thr Ala Met Lys Val Pro Thr	
325 330 335	
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340 345 350	
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Ala Arg Ile Leu Pro Gln Ile Lys Ser Leu His Tyr Phe Lys Leu Leu	
355 360 365	
cca gat tgg aac cac ttt gat ttt gtc tgg ggc ctc gat gcc cct caa	1152
Pro Asp Trp Asn His Phe Asp Phe Val Trp Gly Leu Asp Ala Pro Gln	
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 Gly His Ser Met Gly Gly Ala Leu Ala Ala Tyr Ala Ala Lys Tyr  
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 Pro Glu Glu Arg Val Lys Ala Leu Val Leu Val Ser Thr Pro Ala Pro  
 65 70 75 80  
 Ala Gly Leu Ser Ser Arg Leu Phe Pro Arg Leu Gly Asn Leu Glu Gly  
 85 90 95  
 Leu Leu Leu Ala Asn Phe Phe Asn Arg Leu Ser Arg Ser Val Glu Ala  
 100 105 110  
 Leu Leu Gly Arg Ala Leu Lys Gln Ala Phe Phe Leu Leu Gly Arg Pro Phe  
 115 120 125  
 Val Ser Asp Phe Leu Lys Gln Ala Glu Asp Trp Leu Ser Ser Leu Ala  
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 Arg Pro Gly Glu Thr Asp Gly Gly Asp Gly Leu Leu Gly Tyr Ala Val  
 145 150 155 160  
 Ala Leu Gly Lys Leu Leu Gln Trp Asp Arg Ser Ala Leu Lys Asp Ile  
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 Lys Val Pro Thr Leu Val Ile Trp Gly Asp Asp Asp Pro Leu Val Pro  
 180 185 190  
 Leu Lys Ala Ser Glu Lys Leu Ser Ala Leu Phe Pro Asn Ala Glu Val  
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 Arg Lys His Val Lys Leu Asn Pro Ser His Ser Glu Phe Trp Asp Phe  
 35 40 45  
 Ser Trp His Glu Met Gly Met Tyr Asp Leu Pro Ala Met Ile Asp Tyr  
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 Val Leu Glu Thr Thr Gly Gln Glu Lys Leu His Tyr Val Gly His Ser  
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 Gln Gly Thr Thr Val Phe Phe Val Met Leu Ser Glu Arg Pro Glu Tyr  
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